UNITED NATIONS
ECONOMIC AND SOCIAL COUNCIL

Distr.
LIMITED

E/ECA/UNCTC/3
30 November 1984

Original: ENGLISH

ECONOMIC COMMISSION FOR AFRICA
ECA/UNCTC Joint Unit on
Transnational Corporations

LC/NAIROBI

THE COTTON INDUSTRY OF TANZANIA*

*This paper was prepared by a consultant to ECA. The views expressed herein are those of the author and do not necessarily represent the views of this organization.

CONTENTS

		Paras	Pages
CHAPTER I.	INTRODUCTION	1-3	1-2
CHAPTER II.	THE COTTON INDUSTRY IN TANZANIA	4-29	3-13
	A. History	4-11	3-8
	1. Cultivation	5	3
	2. Production	6-7	3-4
	3. Marketing	8-11	4-8
	B. Tanzania's position in world cotton production	12-16	8-9
	C. Transnational corporations in the cotton industry	17-29	9-13
	1. TNC involvement in the supply of chemicals	22-23	10-11
	2. TNCs and the supply of machinery	24-25	11-12
	3. TNC involvement in production	26-29	12-13
CHAPTER III.	MARKET STRUCTURE	30-51	15 -21
	A. Cotton marketing in Tanzania	30-35	15
	1. Auctions	32	15
	2. Tenders	33	15
	3. Private Treaties	34-35	15
	B. Local pricing of cotton	36-39	16
	C. International marketing of cotton	40-51	16-21
CHAPTER IV.	DISTRIBUTION OF GAINS	52-68	22-28
	A. General	52-59	22-25
	B. Producer incentives	60-68	25
	1. Campaigns and bounuses	60-61	25-26
	2. Distribution of seeds	62	26
	3. Subsidies on fertilizer and insecticide/pesticides	63-64	26-27
	4. Storage facilities	65	27

	Paras	Pages
5. Transport	66	27
6. Cost of incentives	67	27
C Multilateral aid	68	28
CHAPTER V. CONCLUSION	69-72	29
BIBLIOGRAPHY		i-ii

LIST OF TABLES

		Pages
Table 1	History of cotton industry with approximate production figures in bales	6-7
Table 2	World cotton lint production: comparative data (in metric tons)	8
Table 3	Farm input use, 1972-1975/1976	11
Table 4	Disposition of the textile industry in Tanzania	14
Table 5	Cotton price and marketing cost structure (Seed Cotton 1970/71-1974/75)	17
Table 6	Major world cotton traders, 1980	19
Table 7	Cotton seed cake exports	22
Table 8	Quantity and export of cotton	23
Table 9	Importation of cotton within Tanzania: Value of Tanzania's agricultural exports 1973-1979 (Constant (1) 1979/80 prices-Shs.M.)	23
Table 10	Export and local sales of cotton lint on yearly basis	24
Table 11.	Local crushing capacity of cotton seed mills	25
Table 12.	Cotton allocated to mills and production of crude oil	26
Map	Cotton producing areas in Tanzania	

LIST OF APPENDIX

Appendix I. Producer price for seed cotton (1970/71-1982/83)
Price in T. Shs. per kg.

Appendix II. Regional seed cotton production by TCA purchases (1976/77 - 1980/81 - Quantity in Metric tons

Appendix III. Export bales of cotton lint (1973/74 - 1980/81)
Quantity in Metric tons and value in million T. Shs.

Appendix IV. Volume and value of cotton lint shipped from Tanzania (1970-1980) Quantity in Metric tons and value in million T.Sh.

Appendix V. Export earnings from cotton and selected comparative data, 1974-1976

Appendix VI. Major cotton exporters and distribution of their exports, 1978/79 (August to July)

Appendix VII. Purchase of cotton lint by local mills (1973/74 - 1980/81)
(Quantity in Metric tons and value in million T.Shs.)

CHAPTER I

INTRODUCTION

1. Cotton plays a very important role in the economies of most countries where it is produced and especially in the developing world. In terms of value, in 1976 for instance, raw cotton was the fifth most important primary commodity exported by developing countries after petroleum, copper, coffee and sugar. In addition, raw cotton is the leading agricultural export commodity for a large number of developing countries: in about sixteen nations, seven of which are among the least developed countries, 1/ cotton represents 10 per cent or more of total export earnings. 2/ Moreover, when account is taken of by-products such as seed, seed oil, oil cake, meal and above all, textiles, the cotton industry represents a major source of employment: it has been estimated that at least 170 million people in developing countries derive their livelihood from growing, handling and processing raw cotton. 3/ Finally, because of the crop's high technical requirements, cotton serves in many countries as a leader in the process of technological advancement in agriculture.

2. There are about some 80 cotton growing countries, the United States and the Soviet Union accounting for about 42 per cent of total world production. For a long time the United States was by far the leading producer of the crop: until 1960s, it produced well over 25 per cent of world supply with an average annual output of well over 2 million tons of lint. The USSR is its closest rival followed by the Peoples Republic of China and India. These four countries together produce about 75 per cent of world supply. Other important producers are Brazil, Mexico, Pakistan, Egypt and Turkey, usually in that order, with a group average of about on half a million tons a year. On the import side, Western Europe absorbs about 31 per cent, Japan 17 per cent, and the Socialist countries, Latin America, Asia and Africa combined 52 per cent of world production. Over the last decade, consumption of cotton has stagnated at around 4 million tons a year in the developed economies, and appreciable increases in cotton consumption have been registered in developing and socialist countries. This apparent stagnation has been prompted by the fact that most labour intensive industries like textiles and footwear are

---

1/ For a detailed discussion on the subject see UNCTAD, Consideration for International Measures on Cotton: Elements of an International Agreement on Raw Cotton. TD/B/IPC/Cotton, 2 June 1977

2/ For statistical analysis see Appendix Table V and VI.

3/ International Institute for Cotton, Cotton's Importance to Developing World, Brussels, March 1976, p. 8.

deliberately being moved to developing countries by the transnational corporations (TNCs) so as to exploit the advantages of labour which is both cheap and easy to coerce. 4/ Thus in 1970 the developing countries held a 17.1 per cent share of world exports of textiles and clothing. 5/

3. Four major grades of cotton enter the market: the short staple (3/8" - 7/8") produced mainly by India and China accounts for 12 - 15 per cent of world cotton output; the medium staple (7/8" - 11/8") produced in the US, the USSR, Brazil and Pakistan account for 75 per cent; and the long (1 1/8 - 1 3/i) and extra-long (1 3/8" -) staples produced mainly in Egypt, Sudan, India and Peru account for 10 per cent. On the production side, Africa has fourteen cotton producing countries which only account for ten or so per cent of world cotton production: nearly half of this comes from Egypt. 6/

4/ This argument is also shared by T. Heyter in Creation of World Poverty: An Alternative View to Brandt Report London, Pluto Press, 1981

5/ T. Heyter, op. cit.

6/ A Prentice, Cotton with Special Reference to Africa (London, Longman group, 1970) pp.2-4.

CHAPTER II

THE COTTON INDUSTRY IN TANZANIA

A. History

4. The cotton industry is an important component of development in Tanzania, not only in terms of its foreign exchange earnings 7/ but also because of its positive effect on the country domestically. There are currently about 2.5 million Kilos, thus giving the country about 540 million shillings yearly (data for the past three years) from export sales. 8/ Production of cotton in Tanzania is spread over a large area including Mwanza, Kagera, Shinyanga, Tabora, Singida, Mara, Morogoro, Mbeya, Pwani, Tanga, Kilimanjaro and Kogoma, as illustrated in the following map.

1. Cultivation

5. Cotton cultivation was a scattered industry in pre-colonial Tanganyika until the introduction of American upland cotton by the German District Commissioner of Mwanza between 1907 and 1916 and the White Fathers Mission on Ukerewe Island. 9/ Tanzania still produces this kind of cotton, which is often referred to as American Midling. 10/ As in the other countries of East Africa, cultivation of cotton in Tanzania accelerated tremendously when Britain failing to obtain the commodity from the United States, resorted to growing the crop in Sudan, Egypt, India, Uganda, Kenya, Nigeria, Malawi, Zambia and Tanzania. The essential objective here was to keep the Lancaster and Manchester textile industries supplied and operating. This resulted in the creation of the Research Organization in 1920 as part of the cotton the growing Corporation directed by the British Government. The move also led to the establishment of cotton research centres at Ukiruguru and Ilonga in Tanzania.

2. Production

6. Table 1 traces the production of cotton in Tanzania since 1913 to date on a general basis. Examination of trends for the last 10 years shows a marked decline in volume of production despite an increase of acreage under cotton. A number of reasons have contributed to the decline.

(a) Because of the risks it involves, some peasants refused to continue growing cotton and shifted to other crops like maize;

(b) In 1973/74, a serious food crisis in Tanzania led political leaders to launch a food-crop growing campaign, thus making people shift from cash to food crops;

7/ Cotton is among the seven major export crops, along with sisal, coffee, cashew, tea, tobacco and pyrethrum. See (Mwpwelo, D.W.K (ed.), "A decade of Progress 1961-73", Tanzania Notes and Records, No. 76; Tanzania Society, Dar-es-Salaam, 1975 p.60

8/ Mamlaka ya Pamba: Uendelezaji wa Zao la Pamba Tanzania Tangu Kuundwa kwa Mamlaka, p.1.

9/ TCA, History of the Cotton Industry, p.1

10/ J.J. Oloya,"Cotton, Sisal and Tea in East African Economies", East African Literature Bureau, 1969, p. 43.

(c) The villagization process, which started in 1970 and climaxed in 1975/76, forced peasant producers to abandon their already cultivated farms and start new ones;

(d) There have been occasional droughts such as those of 1973-74;

(e) A decline of soil fertility due to overusage has limited cotton cultivation;

(f) Lack of sufficient experts such as extension officers to assist the 2.5 million cotton producers spread over 2 000 villages has had an advertisment in cotton production.

7. It is also important to note that cotton grown in the Western zone areas of the Mwanza, Kagera, Shinyanga, Mara, Tabora, Kigoma and Singida regions which produce most of best or first class cotton. The Eastern zone, which grows some first and second class cotton, comprises the Rukwa, Mbeya, Morogoro, Coast, Tanga and Kilimanjaro regions.

3. Marketing

8. Cotton was marketed through the Uganda Lint and Marketing Board until 1957 when the Lint and Seed Marketing Board was set up in then-Tanganyika. Production of the crop is highly controlled by producers themselves. During the colonial period, in the 1920s and 1930s, Asians acted as middlemen, buying cotton from farmers and selling it to the Lint and Seed Marketing Board. In the late 1930s and early 1940s, newly-formed co-operatives handled cotton purchases from the producers and sales to the Lint and Seed Marketing Board; they also started cotton processing industries. A Price Assistance Fund was created at the time to help in the stabilization of cotton prices. The function of an existing national credit agency was to give farmers inputs in the form of loans through the co-operative unions.

9. In July 1973, the Cotton Authority of Tanzania (TCA) was established by an act of Parliament No. 3 of 8th March 1973. Its objectives were:

(i) To supervise and strengthen the development of cotton production in Tanzania.

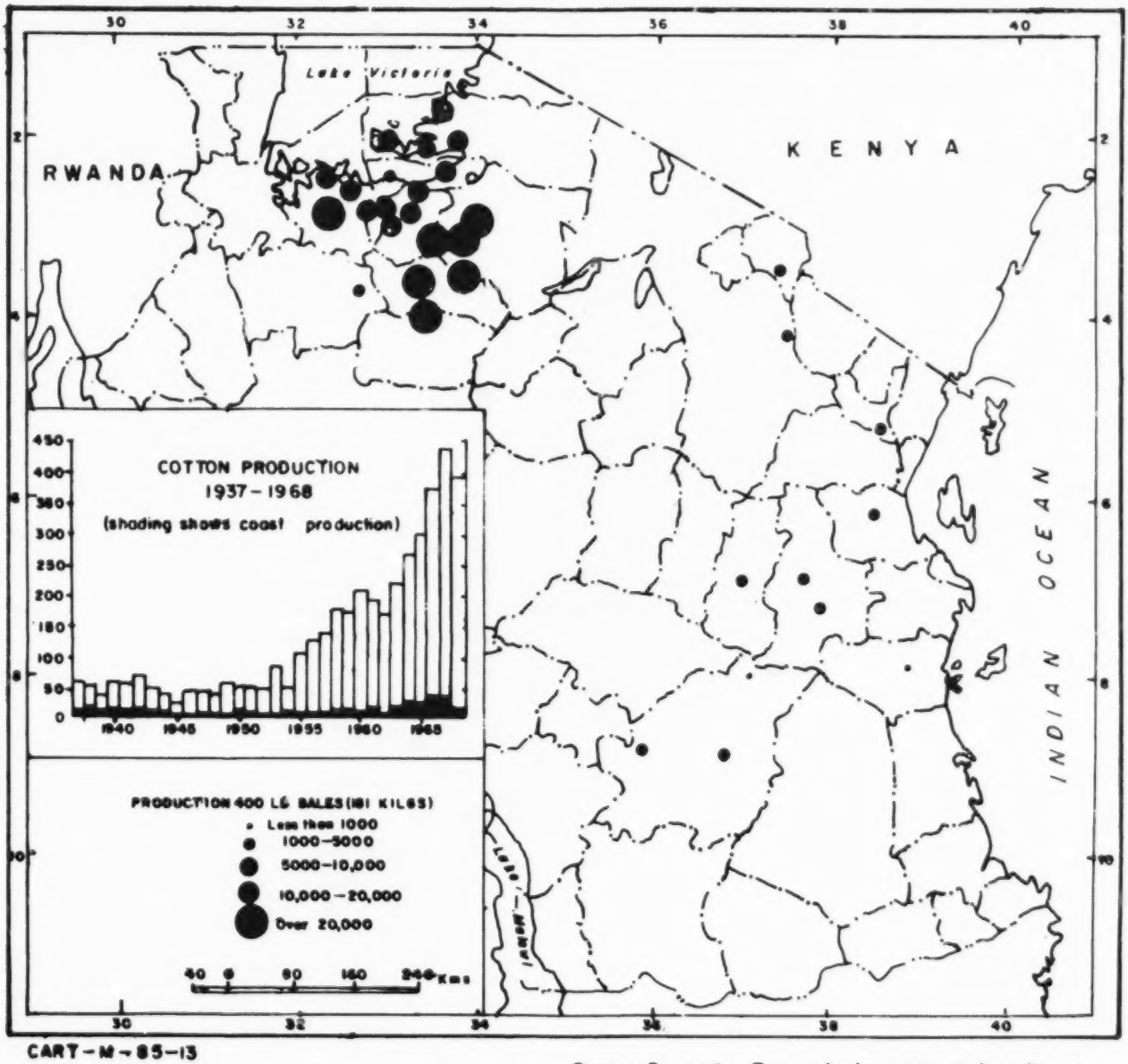
(ii) To deal with all aspects of cotton production, either on its own or in collaboration with other bodies;

(iii) To supervise the buying and selling of cotton within and without the country;

(iv) To advise the government on all issues related to cotton crop. 11/

11/ Mamlaka ya Pamba, Uendelezaji wa Zao la Pamba Tanzania Tanga Kuanzishwa kwa Mamlaka., p. 1.

COTTON PRODUCTION AREAS IN TANZANIA



CART-M-85-13

Source: Berry, L., Tanzania in maps, University of London, 1971, P. 57.

Table 1. History of cotton industry with approximate production
Figures in bales

YEAR	WESTERN AREAS		EASTERN AREAS		TOTAL	
1913	-		-		12 000	Bales
1922	3 250	Bales	4 000	Bales	7 250	"
1923	4 250	"	7 750	"	12 000	"
1924	6 000	"	13 000	"	19 000	"
1925	10 000	"	11 500	"	21 500	"
1926	9 000	"	15 250	"	24 250	"
1927	7 000	"	9 000	"	16 000	"
1928	12 000	"	21 000	"	33 000	"
1929	8 000	"	19 500	"	27 500	"
1930	7 000	"	14 100	"	21 100	"
1931	7 000	"	3 000	"	10 000	"
1932	7 500	"	10 500	"	18 000	"
1933	15 000	"	26 000	"	41 000	"
1934	32 000	"	18 000	"	50 000	"
1935	41 000	"	18 000	"	59 000	"
1936	43 000	"	25 000	"	68 000	"
1937	31 000	"	31 000	"	62 000	"
1938	22 000	"	22 500	"	44 500	"
1939	40 000	"	16 500	"	56 500	"
1940	41 000	"	19 000	"	60 000	"
1941	50 500	"	22 500	"	73 000	"
1942	34 000	"	17 000	"	51 000	"
1943	23 500	"	13 500	"	37 000	"
1944	18 000	"	7 000	"	25 000	"
1945	36 000	"	6 000	"	42 000	"
1946	34 000	"	5 000	"	39 000	"
1947	32 500	"	7 500	"	40 000	"
1948	45 000	"	9 000	"	54 000	"
1949	38 000	"	14 000	"	52 000	"
1950	39 000	"	11 000	"	50 000	"
1951	42 500	"	5 000	"	47 500	"
1952	71 500	"	7 500	"	78 000	"
1953	44 500	"	10 500	"	55 000	"
1954	90 000	"	12 000	"	102 000	"
1955	109 000	"	13 000	"	122 000	"
1956	119 000	"	12 000	"	131 000	"
1957	152 000	"	17 000	"	169 000	"

YEAR	WESTERN AREAS		EASTERN AREAS		TOTAL	
1958	155 000	Bales	20 000	Bales	175 000	Bales
1959	184 000	"	20 000	"	204 000	"
1960	162 000	"	31 500	"	193 500	"
1961	161 000	"	6 000	"	167 000	"
1962	198 000	"	16 000	"	214 000	"
1963	237 000	"	35 000	"	262 000	"
1964	272 000	"	21 500	"	293 500	"
1965	342 000	"	33 000	"	375 000	"
1966	408 500	"	31 500	"	440 000	"
1967	378 500	"	16 750	"	395 250	"
1968	275 000	"	10 000	"	285 000	"
1969	384 000	"	5 100	"	389 100	"
1970	405 500	"	17 000	"	422 500	"
1971					360 260	"
1972					423 983	"
1973					359 139	"
1974					394 000	"
1975					232 125	"
1976	Not available				370 763	"
1977					282 863	"
1978					321 933	"
1979					330 000	"
80/81					297 150	"

Source:

10. By 1976, when the co-operatives were abolished, the TCA was ready to take over their functions.

11. Since its inception the cotton authority has taken various steps to stimulate and improve production and processing of cotton in the country. For example, it supports a system of incentive package, which includes increases in producer prices, supply of subsidized inputs and more, and aims to increase the volume of production and sales: this is illustrated in appendix I, which shows the rising producer prices, and appendices II, III and IV, which show volume of production and sales. Despite these attempts, however, figures for production, sales and value of sales show a declining trend.

B. Tanzania's position in world cotton production

12. Cotton is one of the leading primary export commodities of Tanzania. About half a million households or 2.4 million people are directly involved in its production. Moreover, on the average, cotton exports bring more than five hundred million shillings in foreign exchange annually. Cotton textiles are the leading industry in the country and are gradually displacing foreign textiles. It is further estimated that between 60 - 70 per cent of the cooking oils consumed locally originate from cotton seeds: Pride oil, Super Ghee, Tan-Bond, O.K. are household names. Finally, some cotton seed cake is used locally for animal feed, and the remainder is sold, bringing in foreign exchange. 12/

13. Despite the significance of cotton in the national economy, Tanzania only produces a small proportion of total world cotton supplies. In 1966 for instance, total world cotton production was 49 million bales (each bale is approximately 400 lbs.): Tanzania produced only 434 386 bales, accounting for 0.9 per cent of of the total. 13/ The country is an insignificant world producer and cannot, as a result, control events in the world market: the giant producers who are also giant consumers, control the cotton market. The following table gives some statistics on the subject.

Table 2. World cotton lint production: comparative data
(in metric tons)

Location	1961-65 (average)	1973	1974	1975	1978	1979	1980
World	10 951 462	13 397 735	13 632 993	12 005 661	13 231 000	14 302 000	14 391 000
Africa	918 308	1 233 016	1 215 633	1 139 672	1 207 000	1 163 000	1 213 000
US	3 244 960	2 824 711	2 512 526	1 812 981	2 364 000	3 185 000	2 422 000
USSR	1 701 200	2 424 000	2 661 000	2 500 000	2 731 000	2 821 000	3 200 000
Tanzania	47 483	64 545	62 000	41 000	36 000	60 000	51 000

Source: Compiled from FAO, Production Yearbooks Vol. 29 Rome, 1976, pp. 222-223 and Vol. 34, 1980 pp. 195-1996.

13/ Daily News, Tanzania, February 5, 1976 and A.K. Maliva, The Economics of Cotton Production in Tanzania: An Examination of Some of the Factors that Influence Agricultural Development, Ph.D. Thesis, Princeton University, 1971.

13 International Cotton Advisory Committee, Cotton Monthly Review of the World Situation, Washington, D.C. Vol. 23, Nos. 11 & 12, 1970.

14. The fact that leading cotton producers and major TNCs control the cotton market is illustrated in the role of the US government in influencing the cotton market. In the past, through its cotton price support policy, the US Government was instrumental in setting export prices which influenced overall export patterns. The stockpiles held by the commodity credit corporation (CCC) and the US Acreage Quota Programmes have both an impact on the market, had including limiting the expansion of cotton production in other countries.

15. For many years the US dominated world trade in cotton, and prices were controlled as a direct consequence of the American Farm Policy for Cotton: until 1955, world prices of American-type cotton were largely determined by prices paid to US domestic producers. Between 1955 and 1966 US cotton for export was sold at prices considerably below those ruling in the domestic market. The dual price structure, with an artificially inflated domestic price, meant that US cotton became a poor competitor with other textile fibres, and the CCC had to accept the position of residual supplies in the export market. At this time, competing producers were selling their cotton at prices marginally below the US export price, a situation that left US producers with the options either to sell below the support prices or to accept the role of residual supplier. They chose the latter and as a result, the US share of world exports declined. 14/

16. Between 1964-66 the dual price structure was removed, largely to improve the weakening position of cotton in competition with man-made fibres. User subsidies were removed. In their place the producer received supports by direct payment: domestic users of cotton were given direct payment which equalled the rate on exports. The end result was that US prices dropped, realizing themselves with world prices. There is no doubt that only strong economies like that of US can afford to intervine in the world market and influence it in that way.

C. Transnational corporations in the cotton industry

17. In Tanzania cotton is generally produced by peasants on small acreages: on the average, land cultivated per family ranges between 2.4 - 3.6 hectares, roughly fifty per cent of which is devoted to cotton and the rest to food production. Yields are estimated to range between 340 and 790 kg. per ha. of seed cotton depending on soils, weather and cultivation practices. 15/ Unlike the US where planters are also processors of cotton products and, at times, textiles manufacturers, peasant producers in Tanzania simply produce the crop and more often than not, do not know the final consumers of their produce. At best they know the government

---

14/ For a more elaborate discussion on this see Pallangyo, The Export Prospects for Tanzania Cotton (Unpublished M.Sc. dissertation, Guelph University, 1974).

15/ See L. Berry, Tanzania in Maps, London, University of London Press, 1971, pp. 56-57.

agents through the Tanzania cotton Authority (TCA), the government parastatal that supplies inputs at subsidized prices, sets prices, buys the crop and finally sells it to local and international traders and manufacturers. Under the circumstances, transnational corporations are not directly involved in production or in the early processing stages: the government, through the TCA, is active in production. The TCA effectively and directly participates in the promotion and development of the cotton industry, through education campaigns, extension services, radio programmes, newspaper advertisements, demonstration forms and provision of booklets and posters.

18. TCA also handles the marketing of all the country's cotton lint and seed. It maintains a price stabilization fund to protect cotton producers from price fluctuations in the world market, and provides loans to co-operative unions and villages to enable producers to build roads and bridges, construct and buy cotton ginneries and stores and purchase insecticides and fertilizers. The activities of the authority in the industry thus prevent any substantial TNC involvement.

19. TNCs do not have a direct role at the processing stage either. Cotton is usually bought from small-scale producers unginned by primary co-operatives. The seed cotton then finds its way to the ginneries where it is ginned into cotton lint and cotton seed; the former is categorized here into "AR" and "BR" cotton: "AR" is the clean cotton, normally constituting approximately 90 per cent of the crop. "BR" is the remaining imperfect and damaged cotton of second grade. The ginning machineries and equipment are owned by the primary societies.

20. In the past, peasants depended entirely on the British Cotton Growers' Association for seeds, production inputs and extension services. With independence and the gradual development of indigenous agricultural scientists and researchers, seeds are now locally bred and extension officers are all nationals. Dependence on foreign inputs continues in the areas of chemicals and insecticides.

21. The peripheral activities of TNCs in the cotton industry of Tanzania are thus limited to supply of foreign inputs and operation of textile factories.

1. <u>TNC involvement in the supply of chemicals</u>

22. The Tanzania Fertilizer Company, a joint venture between Klockner Company of Germany and the Tanzanian government, provides all the necessary fertilizers for cotton production. Like most chemical-producing industries, the Tanzania Fertilizer Company depends on foreign inputs, and as a result, prices for those chemicals tend to be exorbitant for the average peasant producer.

23. The Tanzania cotton industry is furthermore directly dependent on two foreign companies, Hoechst and Cibagen, both from Germany, for insecticides. These companies have representatives in Dar-es-Salaam and salesmen in the producing regions of Tanzania. Moreover, rather than selling directly to producers, the companies operate through a selling parastatal which, in turn, convinces the government of the importance and efficiency of their drugs, an arrangement that facilitates sales of commodities. The following data provides insight into sales efforts by Hoechst and Cibagen.

Table 3. Farm input use, 1972 - 1975/1976

Year	Fertilizers in Tons Purchased	Used	Insecticide (Thiodon) Ltrs. Purchased	Used	Insec. (DDT) Pacts.	
1972/73	12 700	7 980	1 728 000	748 819	45 000	24 000
1973/74	14 800	9 650	1 940 000	1 054 000	45 000	30 000
1974/75	13 255	10 000	1 580 000	1 254 000	36 000	32 000
1975/76	18 890	10 890	1 900 400	1 314 000	48 000	29 140

Source: Tanzania Cotton Authority, Annual Plans, 1972-76.

2. TNCs and the supply of machinery

24. Tanzania does not produce any ginning machineries: TNCs supply these and related spare parts and other inputs. The ginning machineries are highly specialized. This is understandable given the fact that constant modifications in production processes and machinery in the cotton industry have resulted in a high level of technical sophistication. Tanzania relies mainly on the Pratt Machineries company of England, the traditional supplier. Recently, the TCA has ordered similar machinery from a company in India which produces Pratt equipment under licence. Dependence on TNCs in this area is bound to continue for some time as there are no plans in the foreseable future to start local production of processing equipment.

25. A number of questions arise regarding purchase of equipment including responsibility for identification of both needs and sources. The issues presuppose existence of requisite information about different suppliers, price quotations and efficiency and durability of the equipment, and hence imply that Tanzania's TCA bargaining exports have the knowledge, skills and experience required. Studies have revealed that the level and quality of information available to local negotiators coupled with efficient and capable bargainers determine the final outcome. 16/ Research findings have shown inherent bargaining weaknesses

16/ Dunning, J., Studies in International Investment, George Allen, London, 1970 and Vaitsos, C., "Bargaining and Distribution of Returns in the Purchase of Technology by Developing Countries", Bulletin, Sussex, 1970.

In Tanzania; these are attributable to a multiplicity of factors. First, the institutions created to transfer technology are very weak and lack organizational co-ordination. Secondly, some institutions are not staffed with qualified and experienced experts; some are understaffed, and others which are adequately staffed, underutilize their experts. A third problem area is the information system: the local data bank is still scanty and disorganized. The local negotiators, poorly equipped in both information and experience, can hardly compete with the experienced and professional bargaining experts of the TNCs who have required information at their disposal. 17/ The interaction of these factors generally causes unfavourable bargaining results for Tanzanian negotiated teams, and the Tanzania Cotton Authority is no exception.

3. TNC involvement in production

26. The textile industry in Tanzania has moved through three phases. The pre-independence period was characterized by a virtual absence of textile industry in Tanzania. The country relied on imports from other countries; furthermore, the Nytil Textile Mill in Uganda monopolized the East African market under the protection of the East African Industrial Licensing Council. In fact, until the mid-1960s, cotton was essentially an agricultural commodity for export to Manchester and other places rather than a raw material for a local manufacturing industry.

27. The second phase in the development of the textile industry occurred in the post independence period under the strategy of import substitution. Textiles were given special emphasis because of the abundance of raw materials. Within just half a decade, four integrated mills were established: the Friendship Textile Mill by the Chinese, Mwatex by the French, Kiltex by IPS and Tasini by a local private concern. Mwatex and Kiltex were created as joint ventures between foreign TNCs and the government. The Friendship Textile Mill was handed over to the government after its completion.

28. The third phase is characterized by nationalization and consolidation of the textile industry. After several consultancy reports including Kurt Salmon's in 1970, UNIDO's in 1971, the World Bank's in 1974 and Gherzi Textiles' in 1976, the textile industry was brought under state supervision and control through the Textile Corporation (TEXCO). The government acquired shares in all textiles mills and laid down general operational procedures. Thus since the 1970s, under various management and consultancy arrangements the government, through TEXCO, jointly participates in all textile manufacturing undertakings. Its shares are as follows:

- Blanket Manufacturing, 30 per cent;
- Mwatex, 40 per cent;
- Tasini, 40 per cent;
- Tanzania Bag Corporation, 50 per cent;
- Sunguratex 51 per cent;
- Kiltex 56 per cent;
- Friendship 100 per cent.

17/ For a penetrating analysis see for instance, S.M. Rugumamu, Bargaining Capabilities with Transnational Corporations: The Case Study of Tanzania National Development Corporation, (IDS mimeo, University of Dar-es-Salaam, 1980).

Unlike production and primary processing of cotton, the textile industry is controlled by TNCs technologically, financially as well as in marketing. Table 4 gives a breakdown of shareholding output and employment generation by 1975.

29. The local textile manufacturing industry consumes only about 30 per cent of local cotton; moreover, textile production absorbs a considerable amount of cotton and blended fabrics from outside the country, thus diverting demand that would have otherwise been imposed on cotton production. This is a clear indicatio of the vertical integration of the cotton industry in the overall TNCs operational mechanism.

Table 4. Disposition of the textile industry in Tanzania

MILL	AUTHORIZED AND ISSUED SHARE CAPITAL	OWNERSHIP EQUITY	LOAN	OUTPUT MITRES	EMPLOYEES	MANAGEMENT
TASINI (1961) (Incorporated in Kiltex (1972)	-	Netherland Textile Consortium, Smith Mackenzie Co. Dalgety (E.A.) F.F.C.U., TDFC	-	-	-	-
FIENDSHIP (1964)	T.Shs. 30 000 000	100% TEXCO	51 mil. interest free loan with ten years grace period from P.R. China	26 mil	5 400	Tanzania
MWANZA TEXTILES (1966)	20 000 000 20 000 000	TEXCO 40% NCU 40% Amenital 20%	60 mil. by French Banks. Total Capital Cost 82 mil. in 10 yrs., grace period 2 yrs. at 7% interest	20 mil.	2 529	Textile consult (Italy) and Sodefra (French) Saigol (Pakistan)
KILIMANJARO TEXTILES (1968)	32 000 000 32 000 000	TEXCO 56.24% IPS 25.77% D.E.G.(W.Germany) 8.78% TDFC 5.13% CDFC (UK) 3.27% BODC (UK) 0.81%	T.I.B. 60 mill. TDFC 5.5 mill.	15 mil.	2 986	Tekunion (French)
BLANKET MANUFACTURING (1968)	2 000 000 2 000 000	TEXCO 30% Maruki Co. 35% Ahlen 14% Hemway Bharpal 16.8% Others 4.2%	Japanese Commercial Banks 8 mill.	1 085 347 pieces	-	Japenese
SUNGURATEX	20 000 000 220 000 000	TEXCO 51%	-	13 mill.		US.

Source: TEXCO Annual Plans 1974/78

CHAPTER III

MARKET STRUCTURE

A. Cotton marketing in Tanzania

30. The cotton crop in Tanzania is bought from peasants by the village Governments at specified buying posts. Here it is thoroughly examined for quality, weighed and then purchased unginned if it meets acceptable standards. The unginned cotton is then processed to separate lint from seeds. Some of the seed is sold to mills which use it to make vegetable oil and seed cakes; most of these mills are state owned, though a few are privately owned by wealthy nationals. Some of the seed is exported. About 20 per cent is distributed, once it has been treated for diseases, to peasants free of charge for planting. The cotton lint is sold to foreign cotton traders and local textile mills.

31. Three procedures have been used to market cotton in Tanzania: auctions, tenders and private agreements.

1. Auctions:

32. Auctions are not in use at present for cotton sales. In the past, an auction date was announced ahead of time. Foreign buyers gathered in Dar-es-Salaam, and the usual auctioning exercise began, with the highest bidder buying the crop. It was later found that buyers easily agreed among themselves not to go above certain price levels. Auctions could be forward or ready: selling forward occurred in February while selling ready took place in September.

2. Tenders:

33. This practice occurs when the quantity of cotton for sale does not justify convening an auction. Here potential buyers are asked via telex to make price offers, and the cotton is sold to the highest bidder.

3. Private Treaties:

34. This occurs when a buyer wants to purchase cotton immediately. These sales usually involve very small proportions of the crop, and the prices offered are lower than through auctions and tenders. The practice is not common in Tanzania.

35. Cotton lint is sold either free on board (f.o.b.) at Mwanza, Musoma and Dar-es-Salaam or free on rail (f.o.r.) from the nearest upcountry railway station. Transportation costs from ginneries to Mwanza, Musoma and Dar-es-Salaam when sold f.o.b. or from ginneries to the nearest railway station when sold f.o.r. are borne by TCA.

B. Local pricing of cotton

36. Following government approval, TCA announces the price at which the seed cotton will be bought from the growers. Prior to 1968 this occurred a few weeks before the picking season; at present, prices are published just before the planting season begins. Prices are the same throughout the country: this, in fact, leads to subsidization of high cost producers at the expense of the low cost producers. 18/

37. Prices are fixed locally, depending on past experience with world market cotton prices and based on information and publications of the International Cotton Advisory Committee, which give some indication of the supply situation in the leading cotton producing countries of the world. As a result, demand conditions facing Tanzania cotton are assessed and established, and prices fixed.

38. The Authority then estimates the price per pound of cotton lint which it will pay to the ginneries and establishes it, ex-ginnery for both "AR" and "BR" lints. If the actual world market price is lower than the fixed price for cotton lint ex-ginnery, there are two sources of relief: proceeds from the cotton seeds which are sold to the oil mill and abroad, and the Price Assistance Fund, which comprises surpluses accumulated from past operations of the industry. From the fixed ex-ginnery prices other costs include ginning, transport, insurance, Authority and Co-operative society levies, government export tax and the ginning development fund. The following table gives a clear breakdown of the distribution of the cotton revenues for five years.

39. The table indicates the division in the cotton price between different parties involved in marketing and production, and highlights the increase in prices realized for cotton over the past five years. Ironically, however, the producer's ratio has been declining systematically over the years while the cost of living has been rising at fantastic rates.

C. International Marketing of cotton

40. The New York Cotton Exchange, established in September 1870, is one of the leading forums in which world cotton prices are set. The exchange was created by trading and financial establishments in response to the global demands of the burgeoning cotton and textile industry for a continuous market. At present, cotton is bought

18/ For fuller details on the subject see: Herbert Kriesel et.al. Agricultrual Marketing in Tanzania: Background Research and Policy Proposals, Department of Agricultural Economics, Michigan State University, Jan. 1970, p. 68, and Tanzania Lint and Seed Marketing Board, The Annual Reports 1966-67, Dar-es-Salaam, pp. 38-39.

Table 5. Cotton price and marketing cost structure (Seed Cotton 1970/71-1974/75)

Item	1970/71 Cts	%	1971/72 Cts	%	1972/73 Cts	%	1973/74 Cts	%	1974/75 Cts	%
Sales Price	164	100	192	100	194.9	100	293.4	100	345	100
Export Tax	6.8	4.2	6.8	3.5	6.8	3.5	6.8	2.3	24.4	9.1
Authority Margin	24.6	15.2	55.2	28.7	55.0	28.2	151	50.6	139.6	40.5
Co-operative Margin	26.6	16.5	26.6	13.9	26.3	13.5	34.0	11.4	422	11.9
Producer Return	103.4	64.1	103.4	53.9	106.6	54.8	106.6	35.7	139.8	40.5

Source: Ministry of Agriculture, 1977/78 Agricultural Price Review, (mimeo, 1978).

through future contracts. The future market provides the central market place where actual and potential commodity buyers and sellers make bids and offers for contracts covering delivery in subsequently designated months. Each contract is referred to as a future. The two major participants in futures transactions are hedgers and speculators. The rational for hedging springs from price uncertainties endemic in all stages of production and marketing due to economic crises, wars, vagaries of nature and the like.

41. Very small amounts of cotton are traded on the spot; instead, most of it is bought and sold through contracts for foward or future deliveries. Relatively short-term contracts, three to twelve months, predominate the international cotton trade. Long-term contracts covering one to two years are uncommon.

42. In addition to New York Cotton Exchange quotes international cotton price analyses are based on price quotations from trade sources as published in Cotton Outlook and by the International Cotton Advisory Committee. The most widely-used indicator for cotton is the Liverpool Outlook Index "A" which analyses price movements. The basis for calculation in this report is the average of price quotations for the five cheapest ten SM-1 1/16" cottons c.i.f. Northern Hemisphere; this gives a more representative index of prices for cotton traded than an average of all ten prices would, since it is presumed that the cheapest cottons are preferred by buyers and are more active in trade. These quotations are offer prices and thus represent prices at which merchants are ready to deal. 19/

19/ UNCTAD, Consideration of International Measures on Cotton: Act Stabilize the International Prices of Cotton. TD/B/IPC/Cotton, 11/October 1978.

43. There are about fifteen major cotton traders representing fifteen large multi-product corporations which handle 85-90 per cent of the world cotton. Of these, two are Western European companies, five are Japanese conglomerates and eight are private U.S. corporations and companies. The following table demonstrates their relative strengths.

44. UNCTAD has observed that most of the major cotton dealers are dominant in the markets for other commodities: Volkart in coffee, Ralli Bros in tropical hardwoods, grain, coffee, tea, rubber, metals and hard and soft fibres. This puts them in an advantageous position in bargaining with the national marketing institutions with which they deal. Their bargaining superiority is further accentuated by the fact that their organisational structure is characterized not only by vertical and horizontal integration, but also by interlocking directorates. Very close links have been forged between these traders and transnational banks. They can therefore afford to buy as many large forward contracts as possible without suffering financial constraints.

45. The major cotton traders possess networks of economic and trading intelligence which they deploy to conduct their transactions with a speed and flexibility unmatched by national marketing institutions. Instances of information sharing among the large marketing firms in respect to specific marketing activities are not uncommon, although this alternates with competition based on concealment of key information from each other. 20/ This advantage weakens the premises on which the tender arrangement is based.

46. Most of the trading companies are major hedgers and speculators on the New York Cotton Exchange where some have their own seats and others operate through brokers. Their information systems are very elaborate and are used during bargaining sessions. In addition, some of the international traders are also dominant in domestic trade in large cotton producing countries like the US and Brazil.

47. These various advantages have at times been abused by the companies in distorting prices. The most widespread manipulative practice in the futures market is called the "long squeeze": this occurs when a trader or a group of traders control a substantial proportion of the contracts in the maturing future as well as a significant portion of the deliverable cotton supplies and uses control of these two vantage points to alter prices for that particular future. 21/ A second mechanism

---

20/ UNCTAD, Consideration of International Measure on Cotton, op. cit., pp. 13-14.

21/ Allen B. Paul, US Department of Agriculture, Economic Research Service, Treatment of Hedging in Commodity Market Regulation.

Table 6. Major world cotton traders, 1980

Rank a/	Trader	Country of Origin	Remarks
1.	Ralli Brothers	UK, Liverpool	Average annual turnover well over 1 million bales, at times going up to well over 2 million.
2.	Volkart Brothers	Switzerland, Winterthur	Operational offices include New York, Osaka, Bremen and elsewhere.
3.	McFadden/Valmac	US, Memphis and Brazil, Sao Paulo	Ranks probably equal with Valkart, at times ahead and at time just behind
4.	W.B. Dunavant	US, Memphis	Trades nearly exclusively on the American continent but in turnover equals Ralli.
5.	Bunge and Born	US, New York	With major operational headquarters in New York, Latin America, London, Antwerp, Osaka and elsewhere.
6.	Cargill	US, Minnesota	-
7.	Allenberg Cot. Co.	US, Memphis	-
8.	Weil Brothers	US, Memphis	-
9.	H. Nolsen and Co.	US, Dallas	Owned jointly by interests in the Federal Republic of Germany and US.
10.	Cotton Import & Export Co.	US, Dallas	
11.	Toyo Menka Kaisha	Japan, Osaka	Deals foremost in American cotton. Average annual turnover 1 billion bales.
12.	Sumoto Shoji Kaisha (and Sumoto Menka)	Japan, Osaka	Deals foremost in USSR cotton - turnover as above.
13.	Citoh and Co.)		
14.	Marubeni - Iida) Co.)	Japan, Osaka	Average annual turnover over 500 000 bales.
15.	Nichimen)		

Source: UNCTAD, Consideration on International Measures on Cotton: A Preliminary Analysis of some Aspects of Marketing and Distribution of TD/B/IPC/Cotton/19, August 1980, p. 19.

a/ Ranking can change from year to year as volumes traded by companies vary greatly from one year to year.

for manipulation is the "short squeeze". Here, the aim is to depress the price of a particular future to the benefit of a large holder or holders of short contracts. The mechanics of this form of squeeze emanate from a defensive posture of large holders of short contracts striving to protect themselves from the long squeeze described above. The essence of a short squeeze is either to deliver or effectively threaten to deliver a greater quantity of the commodity than a cash market can readily absorb. Deliveries or the threat to deliver force holders of long contracts to liquidate their long positions at progressively lower prices. 22/ Thus through manipulative practices, large trading companies destabilize prices.

48. In summary, the price quotations from New York and Liverpool Cotton Exchanges on which national marketing institutions depend are subject to manipulative practices of giant trading companies. The price information disseminated to the rest of the world is by the same token distorted. Analyses of different marketing boards and other institutions selling cotton in most developing countries show that they are price takers: the producing countries of the Third World hardly influence price levels in the world cotton market.

49. The Tanzania Cotton Authority has found itself entangled in the above-mentioned marketing system. TCA sells its cotton to the following traders:

(i) Ralli Brothers of Liverpool, UK;
(ii) Volkard Brothers of Winterthur, Switzerland;
(iii) Bunge and Born of New York, USA;
(iv) Cogecot of Switzerland;
(v) Yugotextile of Yugoslavia;
(vi) Cotton Distributer Incorporate of Switzerland;
(vii) Nan-Fung Textiles of Hong Kong;
(viii) Bouma Hinde of Liverpool, UK;
(ix) Cassir Compan of Liverpool, UK;
(x) Fair Brothers of Switzerland.

Source: TCA Marketing Department

50. Some of these trading companies are not among the leading fifteen companies referred to earlier. However, it can safely be assumed that although they are not related to them, at least they are much better organized and much more informed than national marketing institutions.

51. In an effort to maintain solidarity with fellow producers and consumers in order to minimize the impact of trading companies, Tanzania is a member of several cotton associations. These include the International Institute for Cotton, the

Liverpool Cotton Association, the Bremen Cotton Association (for arbitration) etc. Moreover, Tanzania participates actively at the UNCTAD negotiation meetings aimed at creating the integrated commodity agreement. Above all, Tanzania is a member of the Lome Convention and thus enjoys the facilities of the Stabex scheme. In 1976 for instance, Tanzania, along-side Benin, Burundi, Upper Volta and Uganda, received transfer payments to compensate for the drop in world market prices for cotton for a total value of 9 million units of accounts. These payments have mitigated the effects of drops in cotton prices on the export earnings of the participating countries. In addition, 11-12 per cent of all Stabex transfers in its first two years of operation were made on account of cotton, an indication that cotton price fluctuations have had harmful effects on the export earnings of developing cotton exporting countries. Finally, Tanzania is a member of the World Bank and the International Monetary Fund. The latter administers the Compensatory Financing Facility to member countries who are beset by serious balance of payments problems due to commodity price instability. Tanzania has also been a constant recipient of this aid in connection with drops in world prices for different primary commodities including cotton.

CHAPTER IV

DISTRIBUTION OF GAINS

A. General

52. As has been argued earlier, transnational corporation, involvement in the cotton industry in Tanzania is minimal. Although companies like Klokner, Hoechst and Cibagen of West Germany operate through the government of Tanzania, they have no direct dealings with cotton producers. Agreements signed between these TNCs and the government do not necessarily involve the cotton industry directly.

53. It is therefore necessary to discuss the gains that Tanzania as a whole and producers in particular earn from the development of cotton industry. As discussed earlier, Tanzania draws substantial foreign exchange earnings from sales of cotton and cotton seed cakes: most of the cotton seed cake produced is exported, at the rate, for the past eight years, of an average of 34 000 tons per year earning the country the amounts shown in Table 7.

Table 7. Cotton seed cake exports

Year	Volume (100/t)	Value (Sh. mill.)
1974	40	28
1975	43	32
1976	29	34
1977	34	53
1978	24	27.5
1979	23	32
1980	9	14

Source: Price Policy Recommendations for the 1981-82 Agricultural Price Review - Annex 8 - Cotton, Dar-es-Salaam, September 1980, p. 8. The table shows a general declining trend in the local processing of cotton seeds over a seven year period. The same trend is also noticed in the monetary earnings. This is so precisely because cotton production has declined over the years as appendix 3 shows.

54. Trends in cotton in general and the earnings that accrue therefrom are shown in Table 8.

Table 8. Quantity and export of cotton

Year	'000(t)	Shs. (mill.)
1973	62	343
1974	50	461
1975	40	312
1976	58	635
1977	40	541
1978	43	420
1979	39	498
1980	31	399

Source: Price Policy Recommendations for 1981-82 Agricultural Price Review Summary and Price Proposals Dar-es-Salaam, Sept. 1981.

55. Cotton exports have also shown a declining tendency. This cannot in any way be attributed to local consumption, as increases here have been rather slow. Instead, over time peasants have produced less and less cotton as indicated in Appendix II.

56. The argument here is that although the trend of production has been declining over time, the cotton industry is still an important source of foreign exchange to the country. This is apparent in a comparison of the value of cotton and other leading agricultural exports between 1973 and 1979 as shown in Table 9.

Table 9. Importation of cotton within Tanzania: Value of Tanzania's agricultural exports 1973 - 1979 (Constant (1) 1972/80 prices - Shs. M.)

	1973	1974	1975	1976	1977	1978	1979
Coffee	1 089	663	739	917	2 590	1 552	1 274
Cotton	713	841	473	945	717	501	517
Sisal	641	1 070	594	516	486	398	502
Other	1 559	1 197	1 473	1 [illegible]	1 [illegible]	1 306	908
Total	4 002	3 771	3 771	3 279	5 063	5 757	3 201

Source: Price Policy Recommendations for 1981-82 Agricultural Price Review. Summary Price Proposals Dar-es-Salaam, September 1980.

57. Of the leading cash crop exports, cotton revenues come only second to coffee. This indeed underscores the importance of the crop not only in the agricultural sector but in the economy as a whole. The cotton industry has been important in other spheres of national economy. The country makes use of the cotton textiles that are produced internally: 30 per cent of cotton lint is consumed domestically while around 70 per cent is exported, as seen in the following table.

Table 10. Export and local sales of cotton lint on yearly basis

Crop Year	Export (t)	Local Mill Purchase (t)	Total (t)
1970/71	65 996	7 883	73 879
1971/72	54 912	8 520	63 432
1972/73	65 258	9 471	74 729
1973/74	53 883	10 833	64 716
1974/75	50 062	14 684	64 746
1975/76	32 822	10 007	42 829
1976/77	56 910	10 182	67 092
1977/78	40 939	10 428	51 369
1978/79	42 008	14 146	56 154
1979/80	31 409	12 718	44 127
1980/81	31 679	19 005	50 680

Source: Price Policy Recommendations for 1981-82, Agricultural Price Review, Annex 8 - Cotton, Dar-es-Salaam, September 1980.

58. Manufacturing of oil is another important by product hence the cotton seed oil industry has been a great help not only to the cotton producers themselves but to the nation as a whole. The country produces 125 650 tons of cotton seed of which 68 200 tons are used for manufacturing oil in Tanzania's 18 cotton seed oil factories, as shown in table 11. However, the factories have low capacity as compared to the amount of seeds produced due to occasional lack of electricity, chemicals, fuel, spare parts and so on. There are as a result large stockpiles of cotton seeds in wherehouses in the regions. Although the crushing of the seed provides a substantial amount of oil as indicated in table 11 below, the country has constantly imported oil. In 1978 for example, Tanzania imported cooking oil worth 21.6 million shillings. 23/ In addition, as shown in table 12, there has been a decline in amounts of both cotton

23/ Tanzania Cotton Authority, Annual Report 1977/78.

Table 11. Local crushing capacity of cotton seed mills

	Day crushing capacity (t)	Annual capacity (t)
6 mills, Mwanza (27 expellers 2 VIP).	165	41 250
3 mills, Mwanza (20 Expellers	130	32 500
5 mills, Shinyanga TCA (55 expellers)	275	68 750
2 mills, mara (9 expellers)	45	11 250
8 mills, West Lake	40	10 000
8 mills, Morogoro TCA	40	10 000
2 mills, Ifakara (Morogoro)	10	2 500
2 mills, Mbeya Region	10	2 500
2 mills, Dar (25 expellers)	125	31 500
1 mill Kilimanjaro (6 expellers)	30	7 500
TOTAL Crushing Capacity		27 5000

Source: Price Policy Recommendations for 1981-82 Agricultural Price Review - Annex 8 Cotton Dar-es-Salaam, September 1980, p.7.

seeds crushed and oil produced, which indicates that the country is far from self sufficient.

59. Both the TCA and the government have spared no effort in promoting the cotton industry in the country. A number of incentives and campaigns have been mounted to motivate the producers, some of which are listed below.

B. Producer incentives

1. Campaigns and bonuses

60. It is argued that with proper campaigns, the volume of production is bound to increase. TCA carried out"increase cotton yield campaigns" as a result of a decline in cotton production in 1975/76. From 1976/77 to 1977/78, production increased from 300 000 to 369 803 bales, and the trend could have continued in 1979/80 to reach 400 000 had it not been for the floods. Despite this, production still picked up in 1978/79 and 1979/80, the yields were 310 241 and 334 127 bales,respectively.

Table 12. Cotton allocated to mills and production of crude oil

Year	Cotton Seed produced ('000t)	Cotton Seed rushed ('000t)	Nominal (18%) Crude oil produced (t)
1972	127	87	14.2
1973	152	106	17
1974	129	90	14.4
1975	146	102	16.3
1976	83	58	9.3
1977	129	81	13.4
1978	90	63	9.5
1979	100	66	10.5
1980	97	61	9.7

Source: Price Policy Recommendations for 1981-82 Agricultural Price Review - Annex 8 - Cotton September, 1980, p. 9.

61. The TCA has a policy of giving a bonus of five cents extra per kg. to those producers who deliver high quality cotton very early during the first four weeks of the buying season. A good percentage of producers enjoy this bonus as some 30 per cent of the crop is bought during the first four weeks of the buying season.

2. Distribution of seeds

62. As an incentive, TCA distributes seeds to cotton growers free of charge. Durin the 1979/80 and 1980/81 planting seasons, 38 300 and 36 000 tons were distributed to cotton growers, respectively. In 1979/80 TCA incurred costs of Shs. 1 850 per ton of seeds distributed and in 1980/81, Shs. 2 100 per ton. The value of seeds distributed in 1979/80 was 40 582 000.

3. Subsidies on fertilizer and insecticide/pesticides

63. The fertilizer company supplies TCA with fertilizer which TCAthen sells to cotton growers at a 50 per cent subsidized price. TCA also sells insecticides to farmers at 75 per cent subsided price. TCA subsidy on insecticide and control equipment was budgeted at 9.4 million shillings in 1978/79 and 21.4 million shilling: in 1979/80. As a result, the use of these inputs increased in 1979/80 as compared t 1978/79. Subsidy budget for 1980/81 was 19 million shillings.

64. Through its subsidies, TCA intends to increase not only the volume but also the quality of production. However, increases in production due to subsidies of this type depend entirely on how and whether they are used by the producers. Furthermore, during peak planting and harvesting seasons in November/December and June/July respectively, there arise needs for hiring labour and using additional ploughs and tractors. Poor peasants who can neither afford to hire labour nor to buy ox-ploughs and tractors either fail to harvest all the crop in time or do not cultivate larg acreages.

4. Storage facilities

65. To date TCA has spent approximately Shs. 11 083 000 on warehouse construction for storing cotton and inputs, especially fertilizers. TCA has approximately 1 566 warehouses with a capacity of an equivalent of 137 990 kgs. of either cotton or inputs. This facilitates timely purchase of present crops and efficient storage of the cotton and eliminates frustrations the producer would otherwise encounter if he had to store the crop himself.

5. Transport

66. In order to facilitate immediate clearance of the purchased crop from the warehouses, TCA has acquired lorries to ferry the crop to the ginneries. Form 1973 to 1980, TCA's fleet only totalled 243 lorries, hence transport handling has been very difficult: TCA has had to appeal to other parastatals and private individuals within the country for help.

6. Cost of incentives

67. Despite the fact that TCA has been trying to promote the cotton industry in the country, it has faced insurmountable problems. Some cotton producers have switched to production of maize and other food crops whose prices are higher and which are less labour and chemical-input intensive than cotton. Secondly, TCA's operating costs have risen so sharply that the authority has been forced to operate on overdrafts. The average amount overdrawn by TCA 1979/80 is TSh. 654 million, or 160 per cent of its annual purchases. 25/ Third, despite the fact that TCA spends huge amounts of money to buy fertilizers and inputs, very few peasants either purchase or use them: only 10-15 per cent of cotton producers use fertilizers given out on credit by TCA. This had been the trend since 1971.

25/ Tanzania Cotton Authority, Annual Reports 1978-1980.

C. Multilateral aid

68. In trying to improve production, the government, through TCA, has invited IDA to finance the Geita project which is expected to involve 3 000 small-holders cultivating both cotton and maize: the expectation is to yield 27 000 tonnes of seed cotton by 1984/85. IDA already funded a project in Kigoma under the Kigoma Rural Integrated Development programme which was to turn out 5 500 bales in 1980/81. The aim behind these two projects is to introduce modern production techniques and hybrid seeds to peasants.

CHAPTER V

CONCLUSION

69. The study has made four major points. In the first place, it has shown that the cotton industry in Tanzania is predominantly a smallholder crop: peasants produce cotton side by side with food crops. Four acres represent the average plot size that a peasant household can afford to maintain efficiently.

70. Secondly, unlike the United States and Brazil where the industry is owned and controlled by giant multi-commodity TNCS, Tanzania has gone through a diametrically opposed experience: the role of TNCs is in most cases peripheral, both at the early stages of production and during the primary stages of processing. Empirical evidence on Tanzania has clearly brought out the central role played by the TCA at all stages of production, motivation, processing, marketing and administration of the industry.

71. Thirdly, specific areas of TNC influence and control in the cotton industry are the supply of chemicals, machineries and spareparts. However, the TCA has always served as intermediary between the TNCs and the peasants. Direct participation of TNCs was only identified in the last stage of cotton processing - the textile industry. Finally, whereas the TCA appears to control the distribution of gains from cotton proceeds, world market prices are in fact determined by giant trading concerns of the developed economies.

72. Fourth, the study has analyzed how gains from the cotton industry are spread over the spectrum of the national economy. Since the role of TNCs in the industry is - peripheral, no specific efforts were made to identify the distribution of gains either in the buying and selling of chemicals and machineries nor in the area of international marketing, where prices are already determined by major trading companies. Attention was paid however to efforts made by cotton producers and consumers in Tanzania in identifying possible favourable alternatives for the industry.

SELECTED BIBLIOGRAPHY

Bates, R.B. Markets and States in Tropical Africa, University of California Press, 1981.

Berry, L. Tanzania in Maps., University of London Press 1971.

Dunning, I., Studies in International Investment, George Allen, London, 1970.

Hieronymus, T., Economics of Future Trading, New York Commodity Research Bureau, 1971.

Jacoby, E., "Transnational Corporations and the Third World Agriculture", Development and Change, Vol., VI No. 3, Jan. 1975.

Kamba, E., Stabilization of Markets of Primary Commodities in Tanzania (Unpublished M.A. dissertation, University of Dar-es-Salaam, 1975).

Kriesel, H., et.al. Agricultural Marketing in Tanzania: Background Research and Policy Proposals, Michigan State University, 1970

Lyakulwa, W., Export Instability and Economic Development in Tanzania, (unpublished Ph.D. thesis Cornell University, 1978).

Madaha, J., Cash Crop Production in Shinyanga District, Tanzania, (Unpublished M.A. dissertation, University of Dar-es-Salaam, 1980).

Malima, K.A., The Economics of Cotton Production in Tanzania: An Examination of Some of the Factors that Influence Agricultural Development, (Unpublished Ph.D. thesis, Princeton University, 1971).

Mukandala, R.S., Tanzania Cotton Authority: Towards Increasing Cotton Production, An Appraisal, (Unpublished M.A. dissertation, University of Dar-es-Salaam, 1977)

Mwanansao, E., Introduction and Expansion of Smallholder Cotton in Kasulu (Unpublished M.A. dissertation, University of Dar-es-Salaam, 1976).

Ngalula, D., The Constraints on the Role of Cooperatives in Rural Development: The Case Study of Victoria Federation of Cooperative Union Ltd. and Nyanza Cooperative Union Ltd. (Unpublished M.A. dissertation, University of Dar-es-Salaam, 1975).

Ntanga, C., Fluctuations in Agricultural Export Proceeds: The Case of Tanzania, unpublished M.A. dissertation University of Dar-es-Salaam, 1977.

Oloya, L.J., Cotton, Sisal and Tea in East African Economies, East African Literature Bureau, Nairobi, 1969.

Pallangyo, E., The Export Proppects for Tanzanian Cotton (unpublished M.Sc dissertation, Guelph University, 1974).

Paul, A.B., Treatment of Hedging in Commodity Market Regulations, US Dept. of Agriculture, Washington, 1978.

Prentice, A., Cotton with Special Reference to Africa, Longman Group, London, 1972.

Rugumamu, S., Bargaining with Transnational Corporation: A Case Study of the National Development Corporation in Tanzania, (mimeo, University of Dar-es-Salaam, 1980).

_____, State Control of Industries and Role of Transnational Corporation, (unpublished M.A. dissertation, University of Dar-es-Salaam, 1979).

Saiers, E.L., The Instability of Export Proceeds of Selected Sub-Sahara African Countries, 1950-1966.

Sinclair, J.L., The Production, Marketing and Consumption of Cotton, Praeger, New York, 1968.

Stewart, F., Technology and Underdevelopment, London, Macmillan, 1972

Streeten, P., "Bargaining with Multinationals", World Development, March 1976.

Tanzania Cotton Authority, Annual Reports (several)

UNCTAD, Report on Commodities (several)

Vaitsos, C.V., Inter-Country Income Distribution and Transnational Enterprises, Oxford University.

Yoshida, M., Government Intervention in Agricultural Marketing in East Africa, Oxford, Clarendon Press, 1971.

APPENDIX I

Producer price for seed cotton (1970/71-1982/83 - Price in T. Shs. per kg.

YEAR	PRODUCER PRICE	
	AR	BR
1970/71	1.10	0.55
1971/72	1.10	0.55
1972/73	1.13	0.60
1973/74	1.13	0.60
1974/75	1.50	0.65
1975/76	2.00	1.00
1976/77	2.00	1.00
1977/78	2.30	1.15
1978/79	2.40	1.20
1979/80	3.00	1.30
1980/81	3.20	1.50
1981/82	3.70	1.70
1982/83	4.70	2.50

APPENDIX II

Regional seed cotton production by TCA purchases (1976/77 - 1980/81 - Quantity in Metric tons

YEAR	1976/77			1977/78			1978/79			1979/80			1980/81		
REGION	AR	BR	TOTAL	AR	BR	TOTAL	AR	BR	TOTAL	AR	BR	TOTAL	AR	BR	TOTAL
Shinyanga	58 926	4 649	63 575	57 007	4 622	61 629	57 074	4 253	61 327	54 310	7 176	16 485	58 066	3 243	**61 309**
Kigoma	2 675	368	3 043	2 109	271	2 380	2 137	201	2 338	2 248	217	2 465	857	-	857
Tabora	6 282	1 050	7 332	6 281	691	6 900	6 345	584	6 929	7 381	1 677	9 058	10 557	744	11 301
Singida	808	378	1 186	652	184	836	628	180	808	385	241	626	1 188	355	1 543
West Lake	10 966	1 048	12 014	10 286	931	11 217	9 724	895	10 619	8 630	649	9 279	9 070	327	9 397
Mwanza	71 686	6 186	77 872	49 647	4 769	54 416	49 394	4 373	53 767	65 503	5 137	70 640	67 147	2 063	**69 210**
Morogoro	5 668	1 023	6 691	6 890	448	7 338	6 701	481	7 182	2 518	325	2 843	4 740	262	5 002
Coast	249	32	281	1 318	66	1 384	1 129	90	1 219	2 292	29	2 321	192	7	199
Tanga	198	90	288	432	119	551	446	133	579	201	46	247	70	18	88
Mbeya	2 446	151	2 597	3 615	118	3 733	3 371	117	3 488	2 684	154	2 838	2 453	87	2 540
Kilimanjaro	501	441	942	442	29	471	634	208	842	311	98	439	277	11	288
Mara	16 489	2 384	18 873	14 613	2 614	17 227	14 684	2 733	17 417	15 598	2 614	18 212	10 333	1 227	11 560
TOTAL	176 894	17 800	194 694	153 292	14 790	168 082	152,267	14 248	166,515	162,091	18 363	180,454	164,290	8 344	173 294

Source: Tanzania Cotton Authority - Period of reference: June/May

Production of seed cotton was at its lowest in 1975/76. This is due to the severe drought in 1974/75.
Vagaries of weather affect cotton growing to a considerable extent. This can be seen from the marked fluctuations in production over the years. In spite of increase in acreage under cotton, production has not increased proportionately because of decline in soil fertility and hence decline in yield per acre.

APPENDIX III

EXPORT SALES OF COTTON LINT (1973/74 - 1980/81)

Quantity in Metric Tons and Value in Million T. Shs.

YEAR	QUANTITY	VALUE
1973/74	50 133	344.01
1974/75	39 545	405.43
1975/76	42 219	393.61
1976/77	51 519	597.86
1977/78	30 123	410.02
1978/79	39 228	464.57
1979/80	50 513	642.93
*1980/81	40 137	587.20

Source: Tanzania Cotton Authority - Period of reference: July/June

* Provisional

APPENDIX IV

VOLUME AND VALUE OF COTTON LINT SHIPPED FROM TANZANIA (1970-1980)

Quantity in Metric Tons and Value in Million T. Shs.

YEAR	EXPORTS	
	Quantity	Value
1970	60 678	247.27
1971	56 364	251.60
1972	64 615	336.95
1973	60 434	335.21
1974	49 931	479.27
1975	39 674	309.69
1976	55 171	613.45
1977	40 421	540.54
1978	46 636	419.10
1979	31 438	398.58
*1980	31 475	398.60

Source: E.A.C. Annual Trade Reports and Tanzania Trade Reports
Period of reference: Calendar Year

*Provisional.

APPENDIX V

Export earnings from cotton and selected comparative data, 1974-1976

	Annual Export Earnings from Cotton ('US'000)	Share of Cotton in Total Export Earnings (per cent)	Cotton Export Earnings as Proportion of GNP (per cent)	Cotton Export Volume as Proportion of Production (per cent)
United States	1 125 500	1.07	0.07	42.18
USSR	924 657	2.83	0.14	29.80
Egypt	519 145	35.08	4.05	48.18
Turkey	298 257	18.26	0.83	49.59
Sudan	223 409	46.77	5.37	80.38
Syrian Arab Republic	157 868	17.04	3.05	71.74
Mexico	149 542	4.53	0.24	52.20
Nicaragua	120 524	27.36	7.61	98.66
Iran	108 393	0.50	0.19	67.10
Pakistan	97 648	8.94	0.89	21.08
Peru	84 467	6.04	0.73	60.41
Guatemala	74 716	11.46	2.06	94.90
Brazil	65 229	0.73	0.06	13.34
El Salvador	62 866	11.12	3.45	89.99
United Republic of Tanzania	61 626	15.48	2.54	79.99
Colombia	54 581	3.58	0.40	39.83
Argentina	38 765	1.08	0.10	28.96
Chad	35 244	83.00 a/	7.77	77.71
Mali	31 593	44.00	6.08	84.29
Afghanistan	31 276	13.35	1.52	59.45
Uganda	29 132	9.35	1.09	72.27
Paraguay	23 739	13.57	1.59	85.14
Ivory Coast	20 777	1.55	0.57	64.82
Bolivia	16 067	3.23	0.79	73.00
Benin	11 522	22.30	3.01	100.00
United Republic of Cameroon	10 155	2.03	0.49	52.38
Angola	9 887	1.13	0.18	34.08
Upper Volta	9 783	22.07	1.54	97.87
Senegal	8 843	1.96	0.50	51.14
Central African Republic	8 080	16.49	2.04	91.39
Yemen	6 560	61.50	0.54	62.26
Honduras	4 380	1.40	0.41	97.89
Malawi	2 724	2.01	0.42	37.28
	1 500	4.10	0.39	87.58

Source: FAO, Trade Yearbook and Production Yearbook; United Nations, Monthly Bulletin of Statistics, and World Bank Atlas.

a/ Average 1974-1975.

APPENDIX VI

Major cotton exporters and distribution of their exports, 1978/79 (August to July)

Exports to/ Exports from	World	Canada	EEC	Rest of Western Europe	Socialist Countries of Eastern Europe	Japan	China	Kong Kong	Other
	'000 bales			Per cent of total exports					
United States	6 206	4	7	4	2	22	11	7	43
USSR a/	3 956	-	18	2	56	10	-	-	14
Egypt b/	695	-	22	11	39	16	10	-	2
Turkey	966	-	31	27	23	3	3	-	13
Syrian Arab Republic c/	533	-	31	11	13	2	24	0	19
Mexico d/	977	2	9	0	1	26	46	1	15
Sudan e/	782	-	21	4	18	9	22	5	21
Pakistan	256	-	3	-	-	40	-	32	25
Brazil	141	-	9	12	-	33	29	5	12
Guatemala e/	699	-	28	6	-	26	36	0	4
Nicaragua f/	507	2	7	1	-	24	30	4	32

Sources: ICAC, Cotton: World Statistics, January 1980, and estimates by the UNCTAD secretariat.

a/ Calendar year 1978
b/ September 1978-August 1979.
c/ August 1977-July 1978
d/ July 1978-June 1979
e/ November 1978-July 1979
f/ February-December 1978

APPENDIX VII

Purchase of cotton lint by local mills (1973/74 - 1980/81)

(Quantity in Metric Tons and Value in Million T. Shs.)

	1973/74		1974/75		1975/76		1976/77		1977/78		1979/80		1980/81			
LOCAL MILLS	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
Urafiki	3 674	31.51	6 065	45.45	4 864	43.68	3 888	47.00	5 602	69.99	6 005	83.12	5 805	83.7	6 161	99.0
Mwatex	4 036	41.91	4 181	30.69	3 445	31.69	1 561	23.97	3 481	44.36	3 536	49.07	3 323	45.9	2 761	41.4
Sungura tex	543	3.35	1 444	11.07	743	7.03	778	9.35	2 405	29.10	2 271	31.65	1 909	29.2	1 711	43.2
Kiltex	2 552	10.47	2 997	21.30	2 456	23.04	1 919	23.45	2 934	36.52	2 072	29.20	2 028	26.5	1 309	21.0
Cotex	-	-	-	-	-	-	-	-	-	-	260	3.31	2 634	9.0	1 222	19.0
Sunflag	-	-	-	-	-	-	-	-	-	-	109	1.57	2 635	37.4	1 493	23.2
Musomatex	-	-	-	-	-	-	-	-	-	-	-	-	869	12.0	977	15.0
Blanket Manufacturing	-	-	-	-	-	-	-	-	-	-	-	-	181	2.3	-	-
TOTAL	10 805	96.24	14 684	108.51	11 508	105.44	8 146	103.77	14 422	180.12	14 253	197.92	17 384	246.0	15 634	261.8

Source: Tanzania Cotton Authority - Period of reference: July/June